

CLAIMS

1. A fan for an alternator-starter, fixed on a rotor (4), with magnetic poles, of the alternator-starter, the fan comprising:

– a metallic insert (13) whereby the fan is fixed on the rotor, and

5 - a radial web (17) and at least one fan blade (12), which are moulded in plastics material on the metallic insert,

characterised in that it includes a magnetic target (14) which, in association with at least one sensor, ensures magnetic following of the rotation of the rotor.

2. A fan according to Claim 1, characterised in that the magnetic target (14) is
10 moulded in situ on the metallic insert (13).

3. A fan according to Claim 1, characterised in that the magnetic target (14) is adhesively bonded on the metallic insert (13).

4. A fan according to any one of Claims 1 to 3, characterised in that the magnetic target (14) is mounted on a tubular portion (20) of the metallic insert (13).

15 5. A fan according to Claim 4, characterised in that the magnetic target (14) is mounted on an internal wall (24) of the tubular portion (20).

6. A fan according to Claim 4, characterised in that the magnetic target (14) is mounted on the external wall (25) of the tubular portion (20).

7. A fan according to Claim 1, characterised in that the magnetic target comprises a magnetic material combined with the plastics material of the web and/or fan blades.

8. A fan according to Claim 1, characterised in that the magnetic material of the target comprises ferrites or rare earths.

9. A fan according to Claim 1, characterised in that the magnetic material of the target is a magnetic plastic material.

10. A fan according to Claim 1, characterised in that it includes a crown element (19) of plastics material constituting a shroud ring, with at least some of the blades of the fan extending from the web to the crown element.

11. A fan according to Claim 10, characterised in that the magnetic target (14) is mounted on the cover (19).

12. A fan according to Claim 10, characterised in that the magnetic target (14) is mounted against the inner circumference of the cover (19).

13. A fan according to Claim 1, characterised in that it constitutes a powder pot for the connecting wires of the rotor.

14. A fan according to Claim 1, characterised in that the blades are of complex form.

15. A fan according to Claim 1, characterised in that the fan blades are spaced apart over at least two stages.

16. A fan according to Claim 1, characterised in that the fan blades are spaced apart over at least two stages.

5 17. A fan according to Claim 1, characterised in that one group of blades is of plastics material moulded in situ on the metallic insert, and in that the remainder of the blades are of metal projecting integrally from the metallic insert.